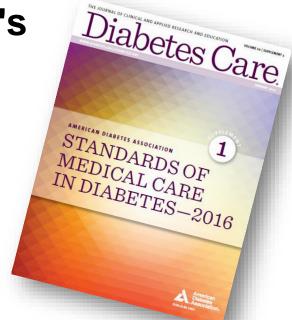
#### **NDEP Webinar Series**

Important Updates of the 2016 American Diabetes Association's Standards of Medical Care in Diabetes

Secrets of Success for the Health Care Team and Community Health Workers



#### **Hosted by:**

NDEP Hispanic/Latino Stakeholder Group









### **Today's Presenters**



Catherine Maxwell, PharmD, CDE Senior Regional Medical Liaison, GA Diabetes Field Medical Team Sanofi, U.S.



Betsy J. Rodríguez MSN, CDE

Deputy Director

National Diabetes Education Program

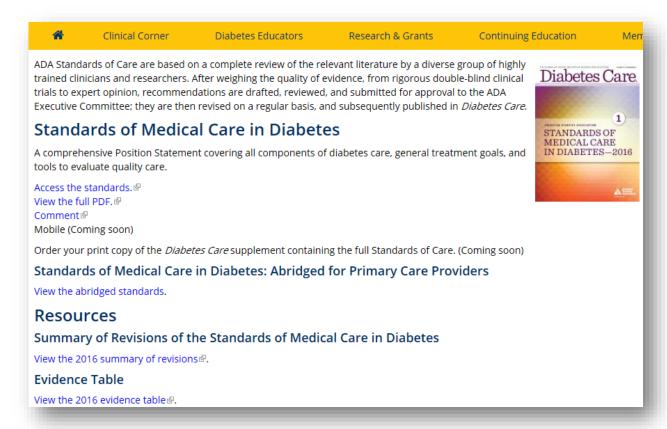
Division of Diabetes Translation

Centers for Disease Control and

Prevention

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

#### **Standards of Care**



http://professional.diabetes.org/content/clinical-practice-recommendations

Diabetes Association Standards of Medical Care in Diabetes. Introduction. *Diabetes Care* 2016; 39 (Suppl. 1): S1-S2

#### Sections in 2016 Standards of Medical Care

- S1 Strategies for Improving Care
- S2 Classification of Diagnosis of Diabetes
- S3 Foundations of Care and Comprehensive Medical Evaluation
- S4 Prevention or Delay of Type 2 Diabetes
- S5 Glycemic Targets
- S6 Obesity Management for the Treatment of Type 2 Diabetes
- S7 Approaches for Glycemic Treatment
- S8 Cardiovascular Disease and Risk Management
- S9 Microvascular Complications and Foot
- S10 Older Adults
- S11 Children and Adolescents
- S12 Management of Diabetes in Pregnancy
- S13 Diabetes Care in the Hospital
- S14 Diabetes Advocacy

### **Evidence Grading System**

A	Clear evidence from adequately-powered, well-conducted, generalizable RCTs, including evidence from a multicenter trial or meta-analysis that incorporated quality ratings in the analysis; Compelling nonexperimental evidence; Supportive evidence from adequately-powered, well-conducted RCTs.
В	Supportive evidence from a well-conducted cohort studies Supportive evidence from a well-conducted case-control study
С	Evidence from case series or case reports  Conflicting evidence with the weight of evidence supporting the recommendations
E	Expert consensus or clinical experience

### Standards Abridged for Primary Care

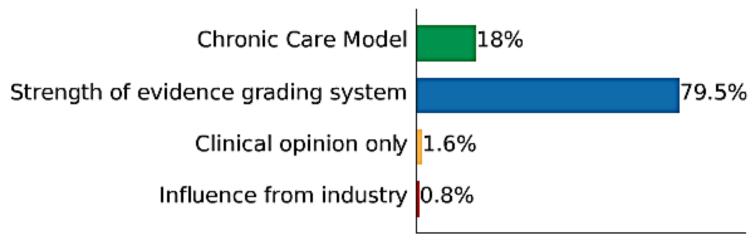
Abridged version of the 2016 Standards of Care containing the evidence-based recommendations most pertinent to primary care

### **Knowledge Check**

- In 2016, the American Diabetes Association published its annual (1) Complete Standards of Medical Care and (2) Standards of Care Abridged for the Primary Care Provider. They are both based on:
  - a. Chronic Care Model
  - b. Strength of evidence grading system (ex. A, B, C & E)
  - c. Clinical opinion only
  - d. Influence from industry

111/

# In 2016, ADA published its annual (1) Complete Standards of Medical Care (2) Standards of Care Abridged for the Primary Care Provider. Based on?



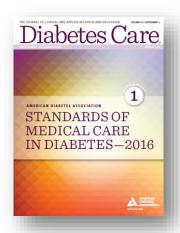
### **Summary of Revisions**

- General changes
- Section changes
  - Revisions to all 14
  - Selected section revisions covered in this presentation
    - General, S1,S2, S3, S8, S9

### **General Change - NEW**

- The Standards of Care will no longer use the term "diabetic" as a noun to refer to patients with diabetes.
  - Diabetes does not define people
- Those with diabetes are individuals with diabetes, not "diabetics."
- ADA will continue to use the term "diabetic" as an adjective for complications related to diabetes (e.g., diabetic retinopathy).

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2016 American Diabetes Association's Standards of Medical Care in Diabetes

# S1: STRATEGIES FOR IMPROVING CARE

### **S1: Strategies for Improving Care**

- Key recommendations
- Diabetes Care Concepts
- Care Delivery Systems, including three key objectives:
  - Optimize Provider and Team Behavior
  - Support Patient Behavior Change
  - Change the System of Care

#### New in 2016:

- What to do when treatment goals are not met
- Tailoring treatment to vulnerable populations.

# **Strategies for Improving Care Key Recommendations**

- Patient-centric approach
- Decisions made in a timely manner and based on evidence-based guidelines
- Aligned with Chronic Care Model
- Team-based with community involvement, patient registries, and decision support tools

# **Strategies for Improving Care Diabetes Care Concepts**

Three key themes are woven throughout the Standards of Care in Diabetes:

- 1. Patient-centeredness
- 2. Diabetes across the lifespan
- 3. Advocacy for patients with diabetes

# **Strategies for Improving Care Care Delivery Systems**

- 33-49% of diabetes patients still do not meet targets for A1c, blood pressure, or lipids.
- 86% do not meet the targets for all A1c, BP, lipids, and nonsmoking status.
- Progress in ASCVD control is slowing.
- Substantial system-level improvements are needed.
- Delivery system is fragmented, lacks clinical information capabilities, duplicates services & is poorly designed.

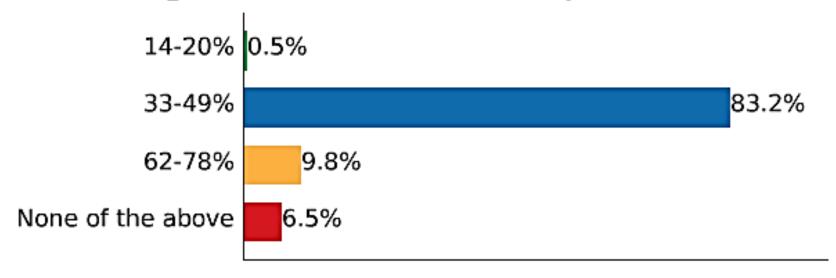


### **Knowledge Check**

- How many patients with diabetes do NOT meet targets for A1c, BP or lipids?
  - a. 14-20%
  - b. 33-49%
  - c. 62-78%
  - d. None of the above

### NDEP National Diabetes Education Program

## How many patients with diabetes do NOT meet targets for A1c, BP or lipids?



# Care Delivery Systems Chronic Care Model

#### **Six Components:**

- 1. Delivery system design
- 2. Self-management support
- 3. Decision support
- 4. Clinical information systems
- 5. Community resources & policies
- 6. Health systems



# Strategies for Improving Care Care Delivery Systems Support Patient Behavior Change

- Implement a systematic approach to support patient behavior change efforts, including:
  - Healthy lifestyle: physical activity, healthy eating, tobacco cessation, weight management, effective coping
  - Disease self-management: taking and managing medication, self-monitoring of glucose and blood pressure when clinically appropriate
  - Prevention of diabetes complications: self-monitoring of foot health, active participation in screening for eye, foot, and renal complications, and immunizations

## Diabetes Self Management Education and Support (DSME/S) Joint Position Statement 2015

- American Diabetes Association (ADA), the American Association of Diabetes Educators (AADE), and the Academy of Nutrition and Dietetics
- DSME/S improves A1c by as much as 1 percentage point in people with T2DM

Diabetes Care July 2015 vol. 39 no. 7 1372-1383



# Care Delivery Systems Chronic Care Model (CCM)

CCM is an effective framework for improving the quality of care and facilitating patients' self-management.

The National Diabetes Education Program (NDEP) maintains an online resource to help health care professionals design and implement more effective health care delivery systems for those with diabetes.



### A Case Study in Coordinated Care



A program of the National Institutes of Health and the Centers for Disease Control and Prevention



### Identify the roles that CHWs/Promotores can play using the chronic care model (CCM):

- Ms. Arias is a 60-year old grandmother with a 12-year history of type 2 diabetes, which is complicated by elevated blood pressure and being overweight. Ms. Arias has a BMI of 36 and has struggled with weight control since young adulthood.
- At a follow-up visit, she had an HbA1c of 8.9 percent, and a blood pressure of 148/88. She has missed her medical appointments for the last year. Also, she made an appointment today complaining that she has not been feeling good for the last three weeks.
- The nurse checks her blood sugar and her result was 450 mg/dl. Ms. Arias tells the nurse that she lives alone and that is having issues getting food, cooking and picking up her medications. She admitted that she has been missing her insulin shots in the last four days. A neighbor took her to the appointment today.
- Ms. Arias' doctor recommended that she should not leave the office without making an appointment to be seen in one week. The receptionist/referral coordinator worked with Ms. Arias to set up an appointment next week.

Diabetes Association Standards of Medical Care in Diabetes. Introduction. Diabetes Care 2016; 39 (Suppl. 1): S1-S2

### When treatment goals are not met - NEW

- Patient adherence should be addressed.
- Barriers may include:
  - Patient factors (e.g., remembering to obtain or take medications, fears, depression, and health beliefs),
  - Medication factors (e.g., complexity, multiple daily dosing, cost, and side effects), and
  - System factors (e.g., inadequate follow-up and support)
- Simplifying a complex treatment regimen may improve adherence.

# **Tailoring Treatment to Vulnerable Populations** *Health Disparities - NEW*

- Lack of health insurance
- Food insecurity (FI)
  - Carefully evaluate hyperglycemia and hypoglycemia and propose solutions. A
  - Recognize that homelessness, poor literacy, and poor numeracy often occur with food insecurity;
     appropriate resources should be made available for patients with diabetes. A

# Health Disparities Community Health Workers (CHW):

- Diabetes management requires individualized, patient-centered, and culturally appropriate strategies.
  - To overcome disparities, community health workers, peers, and lay leaders may assist in the delivery of DSME and diabetes self-management support services
- There is growing evidence for the role of community health workers, as well as peer and lay leaders, in providing ongoing support.



### A Case Study in Coordinated Care - Cont'd

DSME/S referral should be triggered as Ms. Arias has new complicating factors that have arisen that influence self-management. She has food insecurity and transportation issues.

Possible solutions for CHW/*Promotores* are to assist with a plan to help her get consistent and adequate nutrition, help her understand how to match insulin to food intake, and help her arrange for transportation to future MD appointments.

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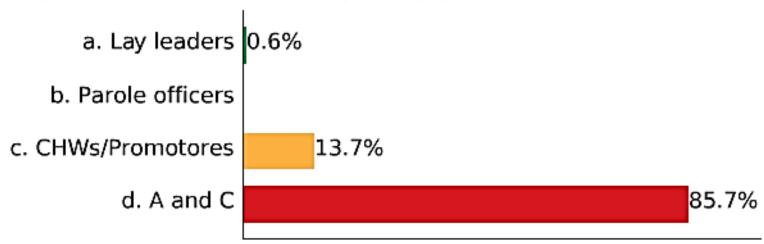
Diabetes Association Standards of Medical Care in Diabetes. Introduction. *Diabetes Care* 2016; 39 (Suppl. 1): S1-S2

### **Knowledge Check**

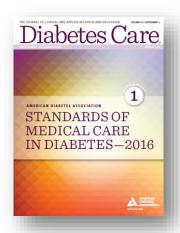
- Diabetes management requires individualized, patient-centered, and culturally appropriate strategies. To overcome disparities, who may assist in the delivery of DSME and diabetes selfmanagement support services?
  - a. Lay Leaders
  - b. Parole officers
  - c. Community health workers
  - d. A and C

111/

Diabetes mgmt. requires individualized, patient-centered, and culturally appropriate strategies. To overcome disparities, who may support?



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2016 American Diabetes Association's Standards of Medical Care in Diabetes

# S2: CLASSIFICATION AND DIAGNOSIS OF DIABETES

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# Classification and Diagnosis Criteria for the Diagnosis of Diabetes

Fasting plasma glucose (FPG) ≥126 mg/dL (7.0 mmol/L)

OR

2-h plasma glucose ≥200 mg/dL (11.1 mmol/L) during an OGTT

OR

A1c ≥6.5%

OR

Random plasma glucose ≥200 mg/dL (11.1 mmol/L)

# Classification and Diagnosis of Diabetes Testing - *NEW*

- To clarify the relationship between age, BMI, and risk for type 2 diabetes and prediabetes, the ADA revised the screening recommendations. The recommendation is now to test all adults beginning at age 45 years, regardless of weight.
- Testing is also recommended for asymptomatic adults of any age who are overweight or obese and who have one or more additional risk factors for diabetes.

# Classification and Diagnosis Screening for Type 2 Diabetes

- Consider testing in asymptomatic adults of any age with BMI ≥25 kg/m² or ≥23 kg/m² in Asian Americans who have 1 or more add'l dm risk factors. B
- For all patients, testing should begin at age 45 years. B
- If tests are normal, repeat testing carried out at a minimum of 3-year intervals is reasonable. C

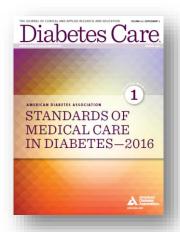
# Classification and Diagnosis Screening for Type 2 Diabetes (Cont'd)

- FPG, 2-h PG after 75-g OGTT, and the A1c are equally appropriate. B
- In patients with diabetes, identify and, if appropriate, treat other ASCVD risk factors. B
- Consider testing for T2DM in overweight/obese children and adolescents with 2 or more add'l diabetes risk factors. E

### Classification and Diagnosis Screening for Type 2 Diabetes in Children and Adolescents

#### Overweight plus any two:

- Family history of type 2 diabetes in 1<sup>st</sup> or 2<sup>nd</sup> degree relative
- Race/ethnicity
- Signs of insulin resistance or conditions associated with insulin resistance
- Maternal history of diabetes or GDM
- Age of initiation 10 years or at onset of puberty
- Frequency: Every 3 years
- Screen with A1c



2016 American Diabetes Association's Standards of Medical Care in Diabetes

## S3: FOUNDATIONS OF CARE

### S3: Foundations of Care

- 1. Self Management Education
- 2. Nutrition
- 3. Counseling
- Physical Activity
- 5. Smoking Cessation
- Immunizations
- 7. Psychosocial Care
- 8. Medications

## Foundations of Care and Comprehensive Medical Evaluation

DSME/S is a cornerstone of diabetes management:

- Basis for initial care
- Part of ongoing care management

## Foundations of Care and Comprehensive Medical Evaluation

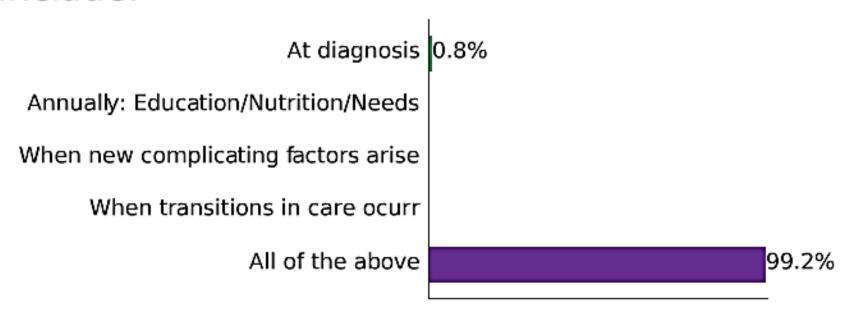
DSME/S algorithm defines four critical time points for DSME/S delivery. These include:

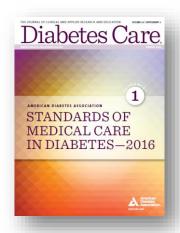
- 1. at diagnosis;
- 2. annually for assessment of education, nutrition, and emotional needs;
- 3. when new complicating factors arise that influence self-management; and
- 4. when transitions in care occur.

## **Knowledge Check**

- The DSME/S algorithm defines critical time points for DSME/S delivery. These include:
  - a. At diagnosis
  - b. Annually for assessment of education, nutrition, and emotional needs
  - c. When new complicating factors arise that influence self-management
  - d. When transitions in care occur
  - e. All of the above

# The DSME/S algorithm defines critical time points for DSME/S delivery. These include:





2016 American Diabetes Association's Standards of Medical Care in Diabetes

## S5: GLYCEMIC TARGETS

# Glycemic Recommendations for Nonpregnant Adults with Diabetes

A<sub>1</sub>c

<7.0%\* (<53 mmol/mol)

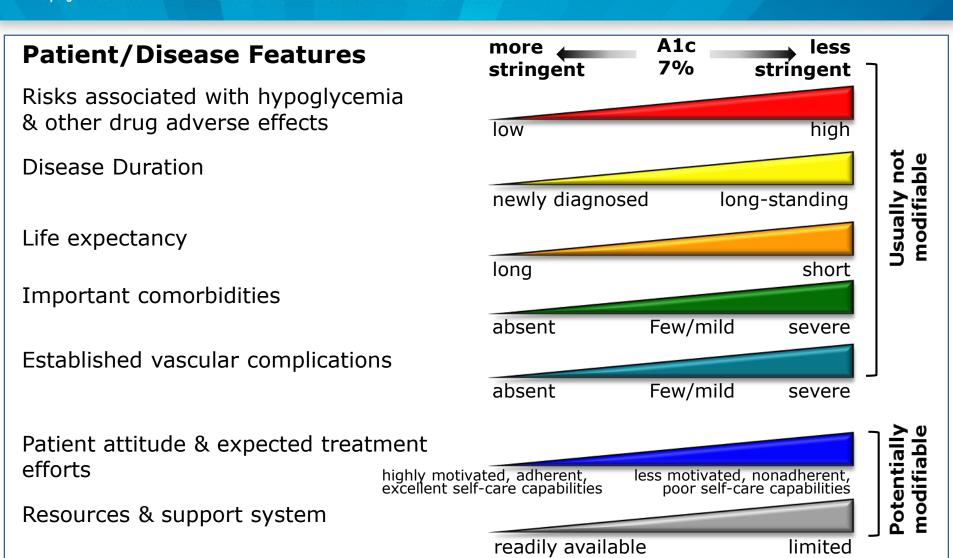
Preprandial capillary plasma glucose

80-130 mg/dL\* (4.4-7.2 mmol/L)

Peak postprandial capillary plasma glucose<sup>†</sup>

<180 mg/dL\* (<10.0 mmol/L)

- Goals should be individualized.
- Postprandial glucose measurements should be made 1-2 hours after the beginning of the meal.

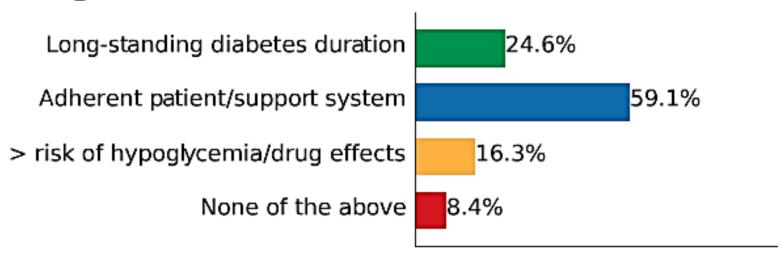


## **Knowledge Check**

- More stringent glycemic goals may be appropriate for individual patients. Which factor(s) support more stringent A1c goals?
  - a. Long-standing diabetes duration
  - b. Highly motivated, adherent patient with good support system
  - c. High risk of hypoglycemia and other drug adverse effects
  - d. None of the above

111/

## Which factor(s) support more stringent A1c goals?



# Glycemic Targets Glycemic Goals for Non-Pregnant Adults

- Lowering A1c to <7% has been shown to reduce microvascular complications and, if implemented soon after the diagnosis of diabetes, is associated with longterm reduction in macrovascular disease. B
- Consider more stringent goals (e.g. <6.5%) for select patients if achievable without significant hypoglycemia or other adverse effects. C
- Consider less stringent goals (e.g. <8%) for patients with a hx of severe hypoglycemia, limited life expectancy, or other conditions that make <7% difficult to attain. B</li>

# Glycemic Targets A1c and ACVD Outcomes

- Diabetes Control and Complications Trial (DCCT): Lower risk of ASCVD events with intensive control
- Epidemiology of Diabetes Interventions and Complications (EDIC):
   57% reduction in risk of nonfatal MI, stroke, or ASCVD death
- Benefit of intensive glycemic control persists for decades and is associated with a modest reduction in all-cause mortality.
- ACCORD, ADVANCE, VADT suggested no significant reduction in ASCVD outcomes with intensive glycemic control.

### Care.DiabetesJournals.org

# **Glycemic Targets Older Adults - NEW**

 Because of the growing number of older adults with insulin-dependent diabetes, the ADA added the recommendation that people who use continuous glucose monitoring and insulin pumps should have continued access after they turn 65 years of age.

## A Case Study in Coordinated Care







## A Case Study in Coordinated Care - Cont'd

- Ms. Arias returns, using a transportation voucher arranged by a CHW, to her one week follow up.
- She reports feeling better and is relieved that her CHW is willing to help her coordinate transportation through her social network to future medical visits.
- She has restarted her insulin and the fingerstick BG before lunch is 175 mg/dl. She questions the need for some of her medications. She feels she is having to make a choice between taking her medications and buying food.
- During her medical appointment, Ms. Arias is offered the option to receive a discount for a home-delivery meal program.
- What are some possible next steps for the CHW?

Diabetes Care.

ARERICAN DIABETES ASSOCIATION
STANDARDS OF
MEDICAL CARE
IN DIABETES—2016

2016 American Diabetes Association's Standards of Medical Care in Diabetes

# S6 OBESITY MANAGEMENT FOR THE TREATMENT OF T2DM

# **S6 Obesity Management for the Treatment of T2DM - NEW**

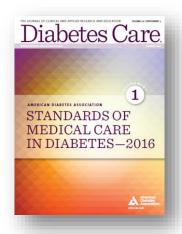
 This new section, which incorporates prior recommendations related to bariatric surgery, has new recommendations related to the comprehensive assessment of weight in diabetes and to the treatment of overweight/obesity with behavior modification and pharmacotherapy.

# Obesity Management for the Treatment of T2DM - Benefits of Weight Loss

- Delay progression from prediabetes to type 2 diabetes
- Positive impact on treatment of type 2 diabetes
  - Most likely to occur early in disease development
- Improves mobility, physical and sexual functioning & health-related quality of life

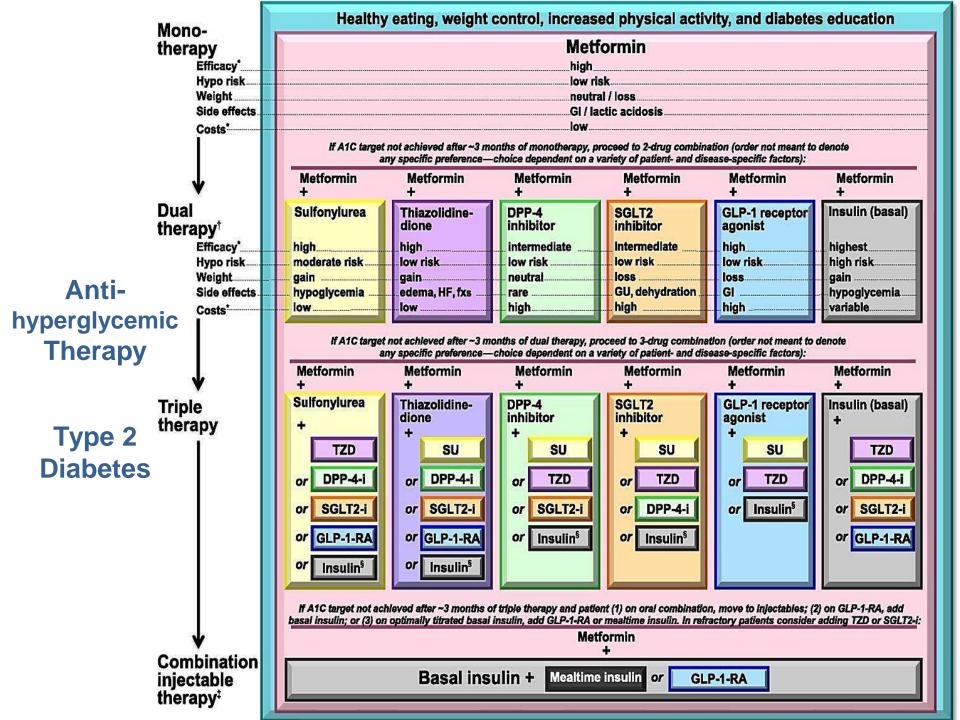
## Physical Activity Recommendations

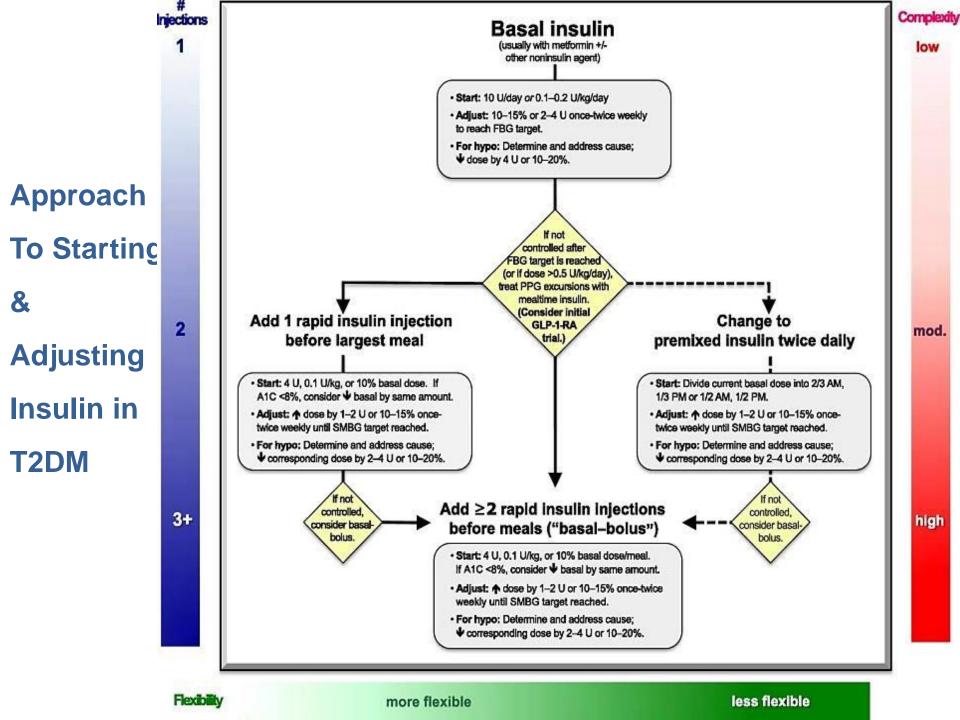
- Children with diabetes/prediabetes: at least 60 min/day physical activity B
- Adults with diabetes: at least 150 min/wk of moderate-intensity aerobic activity over at least 3 days/week with no more than 2 consecutive days without exercise A
- All individuals, including those with diabetes, should limit sedentary time, particularly by breaking up extended amounts of time (>90 min) spent sitting. B
- Adults with type 2 diabetes should perform resistance training at least twice weekly A

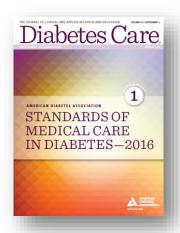


2016 American Diabetes Association's Standards of Medical Care in Diabetes

# S7 APPROACHES TO GLYCEMIC TREATMENT





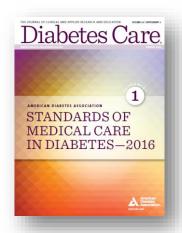


2016 American Diabetes Association's Standards of Medical Care in Diabetes

## S8 CARDIOVASCULAR DISEASE AND RISK MANAGEMENT

# S8 Cardiovascular Disease and Risk Management

"Atherosclerotic cardiovascular disease"
 (ASCVD) has replaced the former term
 "cardiovascular disease" (CVD), as ASCVD is a
 more specific term. - New



2016 American Diabetes Association's Standards of Medical Care in Diabetes

## S9 MICROVASCULAR COMPLICATIONS AND FOOT CARE

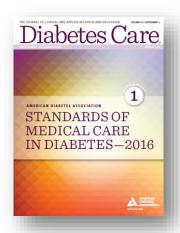
## S9 Microvascular Complications and Foot Care

 "Nephropathy" was changed to "diabetic kidney disease" to emphasize that, while nephropathy may stem from a variety of causes, attention is placed on kidney disease that is directly related to diabetes. - NEW

# **Recommendations: Diabetic Kidney Disease**

### **Treatment**

- Optimize glucose control to reduce risk or slow progression of diabetic kidney disease. A
- Optimize blood pressure control (<140/90 mmHg) to reduce risk or slow progression of diabetic kidney disease. A



2016 American Diabetes Association's Standards of Medical Care in Diabetes

## S14 DIABETES ADVOCACY

## **Advocacy Position Statements**

- ADA publishes evidence-based, peer-reviewed statements on topics including:
  - Diabetes and employment
  - Diabetes and driving
  - Diabetes management in schools, child care programs, and correctional institutions.
- These are important tools for educating:
  - Schools
  - Employers
  - Licensing agencies
  - Policy makers
- Professional.diabetes.org/SOC

## Summary

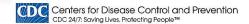
- The ADA Standards of Care are an important resource for those who care for people with diabetes.
- Revisions have been made to this annual publication, which include terminology and clinical recommendations.
- Diabetes self-management education and support are integral to the execution of these recommendations.
- Health care professionals and community health workers (CHWs)/promotores should empower people with diabetes, or those at risk, to receive the care they need.





### Visit CDC NDEP's New Website

http://www.cdc.gov/diabetes/ndep



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CDC A-Z INDEX Y

National Diabetes Education Program







### ▶ Diabetes at Work

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The National Diabetes Education Program (NDEP) works with partners to reduce the burden of diabetes and prediabetes by facilitating the adoption of proven approaches to prevent or delay the onset of type 2 diabetes and the complications of diabetes. NDEP is a joint program of the Centers for Disease Control and Prevention and the National

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Call 1-800-CDC-INFO (800-232-4636)

TTY 1-(888)-232-6348 or visit www.cdc.gov/info

To order resources, visit <a href="https://nccd.cdc.gov/DDT\_DPR/">https://nccd.cdc.gov/DDT\_DPR/</a>

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## Thank you!









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